

With Grant-In-Aid for Scientific Research on Innovative Areas, we have started to have a project on ‘Clustering as a window on the hierarchical structure of quantum systems’. The detailed is written in <http://be.nucl.ap.titech.ac.jp/cluster/eng/index.html>. In this project, we have 7 research groups such as A01, A02, B01, B02, C01, C02 and D01.

Among groups, research group, C02 and D01, are seeking for totally three PDs.

### Research Area:

Research group D01:

Study of hadron-hadron interaction with LQCD: T. Doi(RIKEN)

Hadron structure and reaction: A. Hosaka(RCNP)

Study of clustering of nuclei: Y. Enyo (Kyoto Univ.)

Dynamics of atomic and molecular condensate systems with ab-initio calculation: D. Kim (Kyoto Univ.)

Efimov state in ultra-cold atomic physics: P. Naidon(RIKEN)

Study of Atomic and molecular physics, nuclear and hadron physics with ab-initio calculation: E. Hiyama(RIKEN/Kyushu)

Research group C02:

The C02 group approaches quantum many-body problems associated with various systems such as quark matter, nuclear matter, atomic and molecular matter, strongly correlated electrons, etc. by using ultracold atomic gases as a “quantum simulator.”

Universal physics underlying the hierarchical and phase structure of such quantum systems is investigated from thermodynamic and hydrodynamic viewpoints, particularly by introducing new experimental techniques based on high precision observations of trapped ultra-cold Fermi atoms.

### Job Description:

Theoretical nuclear and atomic physicists

### Qualifications

Candidates must have PhD. Or Candidate are expected to have PhD until end of March in 2019.

### Location:

Those who apply to C02 work in the Kochi Univ.,

Those who apply to D01 can select RIKEN, Kyoto Univ., or RCNP.

### Condition:

From April 1<sup>st</sup> in 2019 to March 31<sup>st</sup> in 2021

There will be evaluation in March in 2020.

Salary is determined on an annual basis subject to the applicant's experience and performance. Social security and health insurance will be provided.

Days off are weekends, public holidays, New Year's holidays (Dec.29- Jan.3).

### Application Documents:

- (1) CV with photograph and E-mail address
- (2) List of publication
- (3) Description of previous research, future research plans (about two or three A4 pages totally)
- (4) Copies of up to three most important publications
- (5) Recommendation letters from two persons
- (6) Applicants should write three places where they want to work.
- (7) If applicants are not able to work on 1<sup>st</sup> April, they should write when they can start to work.

### Document Deadline:

21<sup>st</sup> Dec., 2018

Application documents should be sent by e-mail.

### Selection process

Selection will be made based on application screening. There might be interview.

### Start of Employment

April 1<sup>st</sup>, 2019 or later, but negotiable

### Contact information for submitting Documents

Those who want to apply to D01 should send all of documents (zip file) to the below e-mail.

Emiko Hiyama

[hiyama@riken.jp](mailto:hiyama@riken.jp)

Department of Physics, Kyushu Univ.

Those who want to apply to C02 should send all of documents (zip file) to the below e-mail.

Kei Iida

[keiida@riken.jp](mailto:keiida@riken.jp)

Faculty of Science and Technology, Kochi Univ.